

A method of producing a membrane electrode assembly for use in direct methanol fuel cells by serigraphically printing cathode catalysts or anode catalysts with a carbon backing layer onto graphite or carbon paper, boiling impurities from these layers, and bonding the boiled, printed cathode and anode catalyst layers onto opposite sides of a polymer electrolyte membrane via semi-isostatic compression in a constraint which restricts volume and lateral deformation is provided. Also provided are membrane electrode assemblies produced in accordance with this method.

[illegible]